Disability *and* Health

Kansas 2006 BRFSS

2006

Disability and Health Surveillance Report
2006 Kansas Behavioral Risk Factor Surveillance System (BRFSS)

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Kansas Department of Health and Environment (KDHE)

MISSION

To protect the health and environment of all Kansans
by promoting responsible choices.

Through education, direct services and the assessment of data and trends, coupled with policy development and enforcement, KDHE will improve health and quality of life. We prevent illness, injuries and foster a safe and sustainable environment for the people of Kansas.

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Introduction

Disability is a significant public health issue impacting the lives of many Americans. To date no clear definition of disability exists. However, meaningful conceptual definitions have been offered among professionals. The Behavioral Risk Factor Surveillance Systems based its disability measure on respondents self identifying as having any activity limitations due to physical, mental or emotional problems and/or having a health problem that requires the use of a special equipment such as a cane, wheelchair, special bed, or special telephone.[1]

According to a 2000 Mortality and Morbidity Weekly report, an estimated 54 million Americans reported having disabling conditions. [2, 8]

The impact of disability is not limited to any specific population sub-group. Disability affects persons of all races and ethnic groups, persons of all age groups, and persons of all levels of socio-economic status. In an effort to adequately address this concern, a number of national and international initiatives have been proposed and launched within the past decade. Of notable mention is the United States Healthy People 2010 initiative that clearly states disability related objectives aimed at promoting the health of people living with disabilities to prevent secondary conditions and eliminate disparities between people living with and without disabilities.[3, 4] On a broader scale, a team of WHO scientists also proposed and endorsed the International Classification of Functioning, Disability, and Health (ICF), offering a comprehensive approach to assess and study the complexity of disabling conditions.[5, 6, 7, 8]

While most state and local health departments have relied on national prevalence estimates for program planning and resource allocation in the past, more detailed information on the geographic, economic, and socio-demographic characteristics of people living with disabilities is critical for public health officials to better tailor and allocate scarce resources to improve the quality of lives of persons living with disabilities.[9, 10, 11, 12]

Using the new ICF as a framework, the Office of Injury Prevention and Disability & Health at the Kansas Department of Health and Environment in collaboration

with the Research and Training Center on Independent Living at the University of Kansas, proposed disability related questions for the 2006 Kansas Behavioral Risk Factor Surveillance System (BRFSS). This set of questions serves as a supplement to the current two questions asked in the BRFSS; the current two questions on BRFSS ask respondents to report if they have any activity limitation due to physical, mental or emotional problems and/or a health problem that requires the use of special equipment such as a cane, wheelchair, special bed, or special telephone.[1] The respondents identified as having a disability through these basic questions are then asked the set of questions based on the ICF framework. The outcome of this assessment includes a presentation of socio-demographic variables, chronic health outcomes, service utilization, and functional capacity.

Disability Prevalence in Kansas

Data from the 2006 Kansas BRFSS estimates one in five adult Kansans (20.4%) to be currently living with a disability (defined as those who reported an activity limitation due to physical, mental, or emotional problems or who reported a health problem that requires them to use special equipment such as a cane, a wheelchair, a special bed, or a special telephone). The prevalence of disability was similar among females and males (22.8% [95% CI: 21.5% - 24.2%] vs. 17.9% [95% CI: 16.4% - 19.3%], respectively). The prevalence of disability generally increased with age as shown below.

Prevalence of Disability by Age, Kansas BRFSS 2006

Age (Years)	18-24	25-34	35-44	45-54	55-64	64+
Disability % (95% CI)	10.7 (6.9-14.5)	10.2 (8.2-12.3)	13.4 (11.4-15.3)	21.8 (19.7-23.8)	30.0 (27.5-32.4)	36.9 (34.7-40.0)

The prevalence of disability varies by ethnicity. The prevalence of disability is higher among non-Hispanics than among Hispanics (21.2% [95% CI: 20.2% - 22.3%] vs. 9.7% [6.7% - 12.7%], respectively). The higher prevalence among non-Hispanics as compared to Hispanics was seen even after age-adjustment.

The prevalence of disability appears to be associated with decreasing levels of socioeconomic status. The prevalence of disability increased with both decreasing levels of household income and with educational attainment. The prevalence of

disability increased from 13.6% (95% CI = 12.3% - 15.0%) among adults with a household income of $50,000 or more to 46.6% (95% CI = 41.3% - 51.9%) among adults with a household income of less than $15,000. Among adults with less than high school education, the prevalence of disability was estimated at 25.5% (95% CI: 21.3% - 29.7%) compared to 16.3% (95% CI: 14.8% - 17.8%) among adults with a college degree.

Prevalence of Disability by Income Level, Kansas BRFSS 2006

	‹ $15,000	$15,000 - $ 24,999	$25,000 - $ 49,999	$50,000 +
Disability % (95% CI)	46.5 (41.3-51.9)	27.6 (24.7-30.6)	21.1 (19.1-23.1)	13.6 (12.3-15.0)

Socioeconomic and Education Disparities

Empirical studies suggest socio-economic disparity between people living with a disability and people living without a disability.[13] Kansas BRFSS data also shows socio-economic disparity among adult Kansans living with a disability and those living without a disability. A higher percentage of adults living with a disability has a household income less than $15,000 as compared to the adults living without a disability (15% [95% CI = 12.4%-17.6%] vs. 4.6% [95% CI = 3.6%-5.5%], respectively). On the other hand, higher percentage of adults living without a disability has household income of $50,000 or more as compared to the adults living with disability (50.6% [95% CI = 48.3-%-52.9%] vs. 31.4% [95% CI = 27.4-35.3%], respectively).

Disparity Based on Household Income Level, Kansas BRFSS 2006

Disability % (95% CI)	Income Level			
	‹ $15,000	$15,000 - $ 24,999	$25,000 - $ 49,999	$50,000 +
Yes	15.0 (12.4-17.6)	22.6 (19.4-25.9)	31.0 (27.1-34.9)	31.4 (27.4-35.3)
No	4.6 (3.6-5.5)	14.2 (12.4-15.9)	30.7 (28.6-32.8)	50.6 (48.3-52.9)

A higher percentage of adults living with a disability has less than high school education as compared to those living without a disability (11.9% [95% CI = 9.1%-14.6%] vs. 88.1% [95% CI = 85.4%-90.6-%], respectively).

Disparity Based on Educational Status, Kansas BRFSS 2006

Disability Status (95% CI)	Did not graduate high school	High school or more
Yes	11.9 (9.1-14.6)	88.1 (85.4-90.7)
No	7.9 (6.4-9.4)	92.0 (90.6-93.5)

Health Disparities Among Adult Kansans Living with a Disability

Data from the BRFSS also highlight health disparities between persons living with and without a disability. As guided by the 2006 BRFSS, the Disability and Health Program is developing strategies and action steps to address each issue where people with disabilities face worse health indicators than people without disabilities.

Health Status of Adult Kansans Living with a Disability

Self-rated health. In 2006, the percentage of adult Kansans with a disability who perceive their health status as either fair or poor was approximately four times higher than adults without a disability: Prevalence of 40.0% (95% CI: 37.3%-42.6%) among those with a disability vs. 7.7% (95% CI: 6.8%-8.72%) among those without a disability. The mission of the Disability and Health Program is to increase the quality of life for Kansans with disabilities through promoting health and reducing secondary conditions. Every strategy is designed to increase the health and well-being of Kansans with disabilities.

Secondary Conditions and Risk Factors Among Kansans Living with a Disability

Cardiovascular Risk Factors

Data from the BRFSS suggest that persons living with a disability are at increased risk for cardiovascular disease, as indicated by the following factors:

Diabetes. The prevalence of diabetes was almost three times higher among those with a disability 14.7% (95% CI: 12.9%-16.4%) compared to those without a disability 5.4% (95% CI: 4.8%-6.0%). The Disability and Health Program and the Diabetes Prevention and Control Program have worked together to make people with disabilities a priority as seen in the 2008-2013 Diabetes State Plan. The 2008-2013 Diabetes State Plan envisions increasing the quality of care for people with disabilities by decreasing physical and attitudinal barriers within Kansas health care services.

Obesity. Based on self-reported height and weight, adult Kansans with a disability reported a significantly higher prevalence of being overweight or obese (defined as body mass index [BMI] › 25) at 69.8% (95% CI: 67.2%-72.4%) compared to adults without disability 60.3% (95% CI: 58.7%-62.0%). Among adults with a disability, the prevalence of obesity (defined as BMI ≥ 30) was significantly higher (37.3% [95% CI: 34.7%-40.0%]) when compared to adults without a disability (23.0% [95% CI: 21.7%-24.3%]). As a result of the disparities in obesity, the Disability and Health Program collaborates with the Kansas Physical Activity and Nutrition Program to increase accessibility for people with mobility disabilities for physical activity initiatives such as Topeka's Capitol City Wellness Project. To impact health through promoting physical activity and nutrition on a state-wide level, the Disability and Health Program is providing Living Well with a Disability Program. Living Well with a Disability helps participants with disabilities and chronic conditions establish meaningful goals for their lives while emphasizing attainment of good health as a means of helping to carry out those goals.

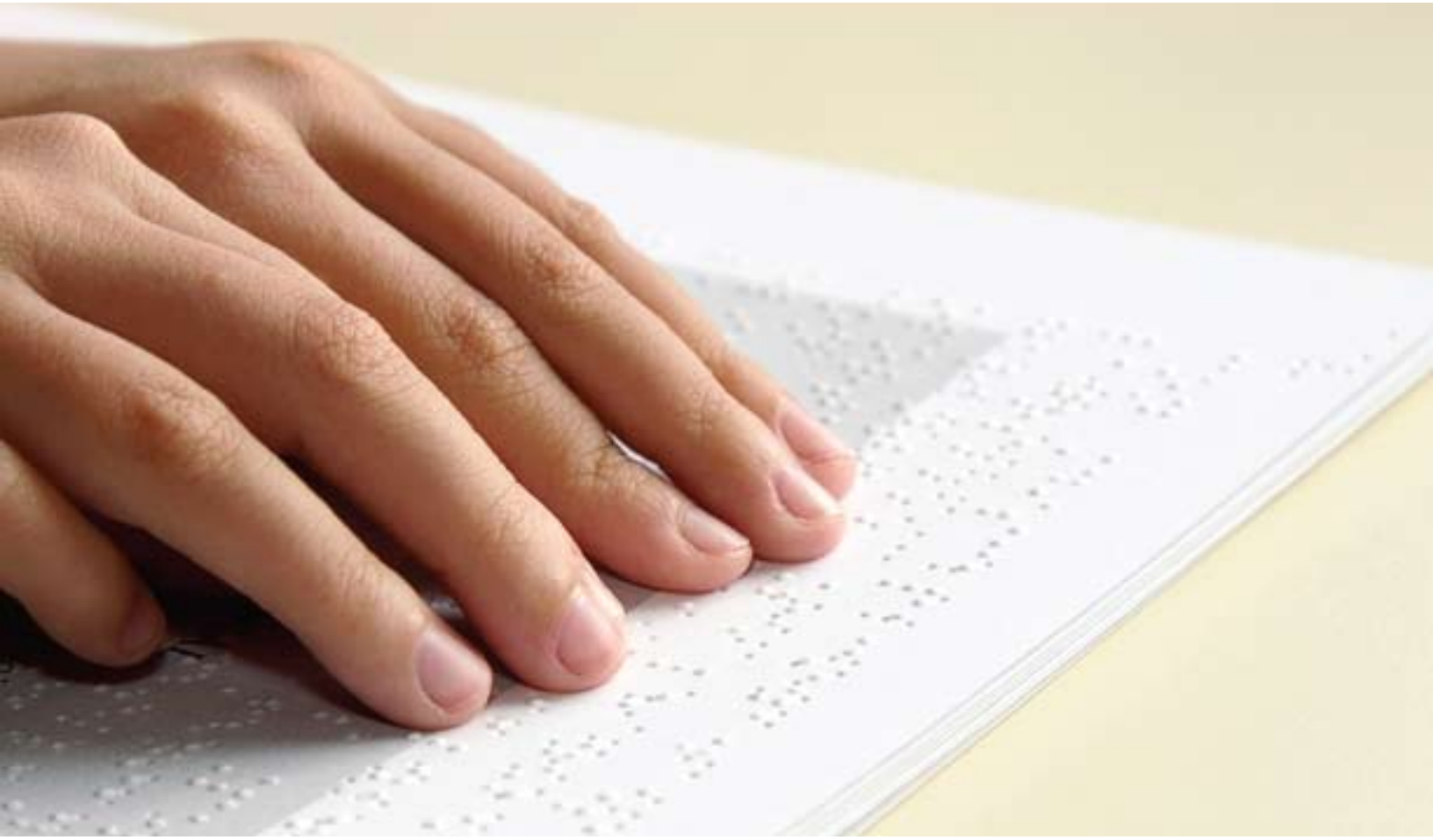
Smoking Status. The prevalence of current smoking among adults with a disability is similar to those without a disability, (22.8% [95% CI: 20.4%-25.2%] and 19.4% [95% CI: 18.0%-20.7%] respectively). Even though there appears to be little difference in prevalence between people with and without disabilities in the 2006 BRFSS, tobacco is an important issue to address to increase health and reduce secondary conditions for Kansans with disabilities. The Kansas Disability and Health Program and the Kansas Tobacco Use Prevention Program are collaborating to reduce the prevalence of smoking for Kansans with disabilities through working with local Independent Living Centers in Kansas. Independent Living Centers serve people with disabilities, thus they are well suited to provide their consumers with information such as the Kansas Tobacco Quitline.

Alcohol Consumption

The prevalence of heavy alcohol consumption (defined as an average of more than two drinks per day among males and more than one drink per day among females) is lower for adults with a disability as compared to those without a disability (38.3% [95% CI: 35.6%- 41.0%] and 51.6% [95% CI: 50.0%-53.2%], respectively).

Seat Belt Usage

When asked about seatbelt usage, the prevalence of not always wearing a seatbelt



(defined as respondents that report they nearly always, sometimes, seldom or never use a seatbelt when they ride or drive in a car) while driving does not differ among adults with and without a disability (32.9% [95% CI: 30.2%-35.6%] vs. 30.6% [95% CI: 29.1%-32.2%], respectively). The Kansas Disability and Health Program collaborates with the Injury Prevention Program and its partners to advocate the establishment of policies regarding primary seat belt laws in the state.

Use of Preventive Services

The Kansas Disability and Health Program is collaborating with the Kansas Early Detection Works Program to increase accessibility to women with mobility disabilities for preventive screening for pap smears and mammograms.

Pap Smear. The prevalence of adult women who have not had a pap smear within the preceding three years appears to be slightly higher among adult women with a disability compared to adult women without a disability (22.0% [95% CI: 18.4%-25.7%] vs. 15.2% [95% CI: 13.2%-17.2%], respectively).

Mammogram. Data from the 2006 BRFSS shows no significant disparity when adult women (40 years and above) with and without a disability are compared (26.5% [95% CI: 23.7%-29.3%] vs. 24.9% [95% CI: 23.1%-26.7%], respectively).

Colorectal Cancer Screening. There also appears to be no significant disparity for testing for colorectal cancer among adult Kansans (50 years and older, males/females) with and without a disability (72.1% [95% CI: 69.6%-74.6%] vs. 75.9% [95% CI: 74.3%-77.6%], respectively).

Health Care Access

Oral Health. Data from the 2006 Kansas BRFSS suggest that adults with a disability are less likely to receive dental care than adults without a disability. Higher prevalence of lacking a recent dental visit (defined as "not visiting a dentist, dental hygienist or dental clinic within the past year") is seen among adults living with a disability (38.2% [95% CI: 35.5%-40.8%] compared to adults living without a disability at 27.4% [95% CI: 25.9%-28.9%]). In response to the huge disparity that Kansans with disabilities face receiving oral health care, the Kansas Disability and Health Program is closely working with Oral Health Kansas and the Kansas Office of Oral Health to increase dental visits for Kansans on the Home and Community Based Service waiver.

Health insurance and regular health care provider. Data from 2006 suggest that there is no significant difference between adult Kansans living with and without a disability regarding having access to health insurance and having a health care provider. The prevalence of adults (18 – 64 years) lacking health insurance and living with a disability was 20.7% (95% CI=19.6%-21.7%), which is similar to adults lacking health insurance but living without a disability 18.3% (95% CI=14.9%-21.7%) (18-64 Years).

Functional Capacity of Kansans Living with a Disability

Besides the core disability questions that are usually asked, Kansas 2006 Behavioral Risk Factors Surveillance System added sets of questions as a state added module themed Disability and Quality of Life. These sets of questions provided additional information on the functional capacity of Kansans living with a disability defined as respondents who reported they were limited in any activities because of physical, mental, or emotional problems or who reported having a

health problem that requires them to use special equipment such as a cane, a wheelchair, a special bed, or a special telephone.

Body Functions and Structures:

On questions related to body function and structures:

- More than half of adult Kansans living with a disability reported having problems with their nerves, muscles or joints because of an impairment or health problem [63.0% (95% CI: 59.2%-66.8%)].

- About one in two Kansans living with a disability also reported having health problems relating to their heart, blood pressure or breathing because of an impairment or health problem [48.6% (95% CI: 44.7%-52.4%)].

- About one in three adult Kansans living with a disability reported having problems with thinking, remembering or controlling emotions because of an impairment or health problem [37.3% (95% CI: 33.6%-41.1%)].

- One in three adult Kansans living with a disability reported having problems with seeing, hearing or communicating because of an impairment or health problem [31.5% (95% CI: 27.9%-35.1%)].

- Approximately 20% of adult Kansans living with a disability reported having problems with their digestive system because of an impairment or health problem [22.3% (95% CI: 19.4%-25.2%)].

- Eighteen percent of adult Kansans living with a disability reported having an impairment or health problem that affects other bodily functions [17.9% (95% CI: 15.1%-20.7%)]

Activities Relating to Task and Action and Involvement in Life Situations

Questions assessing general activities and involvement in life situations showed:

- One in three adult Kansans living with a disability reported having an impairment or health problem that affects their ability to either go to school or work (32.5% [95% CI: 28.9%-36.0%]).

- Thirteen percent of adult Kansans living with a disability reported having impairment or health problems that affect their ability to perform personal care activities including bathing, dressing, grooming, using the toilet or getting in and out of bed (13.3% [95% CI: 10.9%-15.7%]).

- One in three adult Kansans living with a disability reported having an impairment or health problem that affects their ability to perform household activities including paying bills, shopping, cooking, or cleaning the house (31.9% [95% CI: 28.5%-35.4%]).

- More than half of adult Kansans living with a disability reported having an impairment or health problem that affects their ability to participate in physical activities (59.6% [95% CI: 55.7%-63.5%]).

- More than half of adult Kansans living with a disability reported having an impairment or health problem that affects their ability to move around including walking, using stairs, lifting or carrying objects (59.3% [95% CI: 55.3%-63.2%]).

- Among adult Kansans living with a disability and having an impairment or health problem limiting their movement (including walking, using stairs, lifting or carrying objects), three percent attributed their movement difficulty to paralysis (defined as loss of function or feeling that affects the ability to move your arms or legs but does not include amputation or missing limbs) (3.4% [95% CI: 1.6%-5.2%]).

- Among adult Kansans living with a disability and having an impairment or health problem limiting their movement, approximately one percent attributed their movement difficulty to amputation or missing limbs (0.8% [95% CI: 0.2%-1.4%]).

- Among adult Kansans living with a disability and having impairment or health problem limiting their movement, more than half attributed their movement difficulty to chronic diseases such as diabetes and arthritis (55.4% [95% CI: 51.0%-55.9%]).

- Among adult Kansans living with a disability and having an impairment or health problem limiting their movement, approximately half attributed their movement difficulty to something else [54.1% (95% CI: 49.6%-58.5%)].

Issues Related to Accessing Services among Adult Kansans Living with a Disability

The 2006 BRFSS data showed that adult Kansans living with a disability experience difficulty in accessing services due to several reasons. This information is provided in this section. The Disability and Health Program is working on a comprehensive plan to decrease disparities to health care access for Kansans with a disability. Our plan includes sharing resources and action steps with several state agencies, including several programs within the Kansas Department of Health and Environment, the University of Kansas, Kansas Social and Rehabilitative Services, Kansas Department on Aging, Kansas Health Policy Authority and Kansas Department of Commerce. Other organizations, such as the Kansas Association of Centers for Independent Living and Statewide Independent Living Centers of Kansas, are also working with us to remove barriers to healthcare for Kansans with disabilities. The Kansas Disability and Health program focuses on physical, communication and attitudinal barriers within physician offices that Kansans with disabilities encounter while accessing health care.

- Approximately 15% of adult Kansans living with a disability reported experiencing some sort of restriction to needed services such as doctors appointment, counseling, case management, or financial services (15.3% [95% CI: 12.6%-18.0%]).

- Among adult Kansans living with a disability and experiencing some sort of restriction to needed services, approximately 18% attribute this restriction to lack of transportation (17.8% [95% CI: 11.0%-24.7%]).

- Among adult Kansans living with a disability and experiencing some sort of restriction to needed services, more than 80% attribute this restriction to cost of services (81.2% [95% CI: 74.3%-88.2%]).

- Among adult Kansans living with a disability and experiencing some sort of restriction to needed services, 12% attribute this restriction to physical access to buildings, offices or tools needed (11.5% [95% CI: 5.6%-17.5%]).

- Among adult Kansans living with a disability and experiencing some sort of restriction to needed services, approximately six percent attribute this

restriction to another person such as a personal attendant or family member (5.8% [95% CI: 2.0%-9.5%]).

- Among adult Kansans living with a disability and experiencing some sort of restriction to needed services, approximately one percent attribute this restriction to lack of communication aids such as interpreters or alternate formats (1.3% [95% CI: 0.0%-2.7%]).

Technical Notes

Kansas Behavioral Risk Factor Surveillance System Survey

Questionnaire Design

The survey consists of three modules:

- Core questions are asked by all states. The order the questions appear and the wording of the questions are fairly consistent across all states. Types of core questions include fixed, rotating, and emerging health issues.
    - o Fixed core: contains questions that are asked every year. Fixed core topics include health status, health care access, healthy days, life satisfaction, emotional satisfaction, disability, tobacco use, alcohol use, exercise, immunization, HIV/AIDS, diabetes, asthma, and cardiovascular disease.
    - o Rotating core: contains questions asked every other year.
        - Odd years (2005, 2007, 2009, etc): fruits and vegetables, hypertension awareness, cholesterol awareness, arthritis burden, and physical activity.
        - Even years (2006, 2008, 2010, etc): women's health, prostate screening, colorectal cancer screening, oral health and injury.
    - o Emerging Health Issues: contains late breaking health issue questions. At the end of the survey year, these questions are evaluated to determine if they should be a part of the fixed core.

- Optional Modules include questions on a specific health topic. The CDC provides a pool of questions from which states may select. States have the option of adding these questions to their survey. The CDC's responsibilities regarding these questions include development of questions, cognitive

testing, and financial support to states to include these questions on the questionnaire, data management, limited analysis and quality control.

- State added questions are based on public health needs of each state. State added questions include questions not available as supported optional modules in that year or emerging health issues that are specific to each state. Any modifications made to the CDC support modules available in that year make the module a state added module.

Sampling

The 2006 BRFSS was conducted using a disproportionate stratified sampling method. This method of probability sampling involved assigning sets of one hundred telephone numbers with the same area code, prefix and first two digits of suffix and all possible combinations of the last two digits ("hundred blocks") into two strata. Those hundred blocks that have at least one known listed household number are designated high density (also called "one-plus block"); hundred blocks with no known listed household numbers are designated low density ("zero blocks"). The high-density stratum is sampled at a higher rate than the low-density stratum resulting in greater efficiency. Approximately the same number of households is called each month throughout the calendar year to reduce bias caused by seasonal variation of health risk behaviors.

Potential working telephone numbers were dialed during three separate calling periods (daytime, evening, and weekends) for a total of 15 call attempts before being replaced. Upon reaching a valid household number, one household member ages 18 years and older was randomly selected. If the selected respondent was not available, an appointment was made to call at a later time or date. Because respondents were selected at random and no identifying information was solicited, all responses to this survey were anonymous. In 2006, 8,304 residents of Kansas were interviewed.

Response Rate

The CASRO (Council of American Survey Research Organizations) response rate for the 2006 Kansas BRFSS survey was 65.05%. The CASRO formula is based on the number of interviews completed, the number of households reached, and

the number of household with unknown eligibility status. The CASRO response rate is used because in addition to those persons who refused to answer questions, lack of response can also arise because household members were not available despite repeated call attempts.

Limitations

As with any research method, the BRFSS has limitations.

- BRFSS is conducted among non-institutionalized adults residing in the private residences with land lines for telephones, therefore it excludes individuals without telephone service, those on military bases, and individuals in institutions.
- All information is self reported which may introduce bias such as recall bias, reporting bias, etc.
- Due to the sampling and population rate, it is often difficult to obtain subpopulation data such as county level data or data on minorities.
- BRFSS is not ideal for low prevalence conditions.

Weighting Procedures

Weighting is a process by which the survey data are adjusted to account for unequal selection probability and response bias and to more accurately represent the population from which the sample was drawn (to generate population-based estimates for the states and counties. The response of each person interviewed were assigned a weight which accounted for the density stratum, the number of telephones in the household, the number of adults in the household, non-response, non-coverage of households without telephones and the demographic distribution of the sample.

Estimates

Data results from the BRFSS are estimates of the real population prevalence. To account for sampling error and for the accuracy of the estimate, we calculate 95% confidence intervals. A confidence interval contains an upper and lower limit. We are 95% confident that the true population percentage is between the lower limit and the upper limit. The smaller the range between the lower limit and upper limit, the more precise the estimated percentage is. In other words, the narrower the confidence interval, the better.

Split Questionnaire

To accommodate increasing data needs, the Kansas BRFSS used a split questionnaire in 2006. CDC optional modules and state added questions are organized by topics into two sections: questionnaire A and questionnaire B. All 8,304 respondents answered questions from the core section. Then each telephone number was randomly assigned to questionnaire A and questionnaire B prior to being called. Approximately half of the respondents received questionnaire A and the remaining receive questionnaire B, (i.e. approximately 4,000 respondents for each questionnaire).

Advantages of a split questionnaire:

- Collect data on numerous topics within one data year
- Collect in-depth data on one specific topic
- Ability to keep questionnaire time and length to a minimum

Disadvantages of a split questionnaire:

- Complexity of data weighting; additional weighting factors are needed
- Variables on questionnaire A cannot be analyzed with variables on questionnaire B

Analysis of split questionnaire:

The sample size for each split of the questionnaire is approximately half of the total sample size. As mentioned above, each respondent is randomly assigned to questionnaire A or to questionnaire B. The questions regarding certain conditions are included in the core section (e.g., asthma, disability, high blood pressures, etc.). State added questions and optional modules for these conditions are included on questionnaire A or questionnaire B. Therefore, these additional questions on a specific health condition are asked from respondents who are assigned to that particular split questionnaire. This resulted in approximately half of the respondents who were identified with a particular condition from the core section responding to additional questions on the specific condition. Also, the number of adults with the specific health condition may vary on each question due to respondents terminating at various points in the survey.

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Appendix A

Core Disability Module – 2006 Kansas BRFSS

1. Are you limited in any way in any activities because of physical, mental, or emotional problems?
   - 1 Yes
   - 2 No
   - 7 Don't know / Not Sure
   - 9 Refused

2. Do you now have any health problem that requires you to use special equipment, such as a cane, a wheelchair, a special bed, or a special telephone?
   - 1 Yes
   - 2 No
   - 7 Don't know / Not Sure
   - 9 Refuse

Appendix B

State added Disability and Quality of Life Module – 2006 Kansas BRFSS

1. [Because of an impairment or health problem do you have problems with any of the following]:
   … thinking, remembering or controlling emotions?
   - 1 Yes
   - 2 No
   - 7 Don't know/Not sure
   - 9 Refused

2. [Because of an impairment or health problem do you have problems]:
   … seeing, hearing or communicating?
   - 1 Yes
   - 2 No
   - 7 Don't know/Not sure
   - 9 Refused

3. [Because of an impairment or health problem do you have problems]:
   … heart, blood pressure or breathing?
   - 1 Yes
   - 2 No
   - 7 Don't know/Not sure
   - 9 Refused

4. [Because of an impairment or health problem do you have problems]:
   … digestive system?
   1 Yes
   2 No
   7 Don't know/Not sure
   9 Refused

5. [Because of an impairment or health problem do you have problems]:
   … nerves, muscles or joints?
   1 Yes
   2 No
   7 Don't know/Not sure
   9 Refused

6. [Because of an impairment or health problem do you have problems]:
   … other bodily functions which are affected?
   1 Yes (specify:_____)
   2 No
   7 Don't know/Not sure
   9 Refused

7. [Does your impairment or health problem affect your ability with any of the following]:
   … go to school or work?
   1 Yes
   2 No
   7 Don't know/Not sure
   9 Refused

8. [Does your impairment or health problem affect your ability to]:
   … perform personal care activities including bathing, dressing, grooming, using the toilet or getting in and out of bed?
   1 Yes
   2 No
   7 Don't know/Not sure
   9 Refused

9. [Does your impairment or health problem affect your ability to]:
   … perform household activities including paying bills, shopping, cooking, or cleaning the house?
   1 Yes
   2 No
   7 Don't know/Not sure
   9 Refused

10. [Does your impairment or health problem affect your ability to]:
… participate in physical activity?
1 Yes
2 No
7 Don't know/Not sure
9 Refused

11. [Does your impairment or health problem affect your ability to]:
… move around including walking, using stairs, lifting or carrying objects?
1 Yes
2 No (skip to Q16)
7 Don't know/Not sure (skip to Q16)
9 Refused (skip to Q16)

12. [Is your ability to move around due to any of the following]:
… paralysis?
Note: If asked "Paralysis is defined as loss of function or feeling that affects the ability to move your arms or legs but does not include amputation or missing limbs."
1 Yes
2 No
7 Don't know/Not sure
9 Refused

13. [Is your ability to move around due to]:
… amputation or missing limb?
1 Yes
2 No
7 Don't know/Not sure
9 Refused

14. [Is your ability to move around due to]:
… a chronic disease such as diabetes or arthritis?
1 Yes
2 No
7 Don't know/Not sure
9 Refused

15. [Is your ability to move around due to]:
… something else?
1 Yes (specify:_____)
2 No
7 Don't know/Not sure
9 Refused

16. Are you restricted in any way to services you need such as doctor, counseling, case management, or financial?
    1 Yes
    2 No (skip to next module)
    7 Don't know/Not sure (skip to next module)
    9 Refused (skip to next module)

17. [Is this restriction due to any of the following]:
    … lack of transportation?
    1 Yes
    2 No
    7 Don't know/Not sure
    9 Refused

18. [Is this restriction due to]:
    … cost of services?
    1 Yes
    2 No
    7 Don't know/Not sure
    9 Refused

19. [Is this restriction due to]:
    … physical access to buildings, offices or tools needed?
    1 Yes
    2 No
    7 Don't know/Not sure
    9 Refused

20. [Is this restriction due to]:
    … restriction by another person such as a personal attendant or family member?
    1 Yes
    2 No
    7 Don't know/Not sure
    9 Refused

21. [Is this restriction due to]:
    … lack of communication aids such as interpreters or alternate formats?
    1 Yes
    2 No
    7 Don't know/Not sure
    9 Refused

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